MODIS sensor Working Group (MsWG) Summary June 30, 2004

Attendance: Bill Barnes, Bob Barnes, Vincent Chiang, Roger Drake, Gene Eplee, Gerhard Meister, Chris Moeller, Vince Salomonson, Gary Toller, Zhengming Wan, Aisheng Wu, Jack Xiong

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Scheduled Agenda

Item 1: L1B LUT delivery

JX) (1) Terra V4.3.0.11 (June 18) is a regular delivery to DAAC for m1 update. (2) Aqua V4.3.1.8 (June 24) is a regular m1 and RSB RVS delivery to DAAC. (3) Aqua special smoothed m1 and RSB RVS V4.3.1.8_OC.1 and V4.3.1.8_OC.2 for Ocean Color group testing were delivered (June 25).

Item 2: Terra B28 new noisy detector: Ch1

JX) Band 28 detector 1 (product order) became noisy on granule 2004175 (June 23) 02:05 (see attachment pages 2-4).

Item 3: Terra PV detectors status after days 158-162 period

JX) Go back to review the PV detector noise patterns we reported last MsWG. I think this is caused by electronics. We sent some telemetry data from that period to SBRS. We found particular one scan the PV detectors have 4095 DN count. After that there was DCR. Roger discussed with me for Vdet/Itwk test for PV bands.

VS) Will that be another epoch?

JX) No. It's just a short period of time for the test. After that, the setting will come back.

Item 4: MODIS STM MCST/Workshop agenda

JX) We will talk about the challenging issues at the workshop. We hope all three disciplines can provide input for the workshop as well.

VS) Will you bring poster?

JX) MCST will have 2 posters for general calibration and characterization on RSB and TEB.

Item 5: Collection 5 in L1B

JX) Based on the timeline, MCST needs all input by the MODIS Science Team Meeting regarding any L1B action items.

Around the Table

Participant: Roger Drake – Terra PV noisy detectors issue

RD) PV long wave worries me. In the past month, two PV detectors became noisy. Back in 2001 we spent a lot of time on the detector forward bias and reverse bias testing, but did not come up with conclusive answer. But we know what should we be looking for in the Vdet test data, based on the experiences.

Bill) Are you talking about only for PV/LWIR?

RD) Yes. As for RSB we don't see the baseline noise [*referred to Space View DN*] change. We have seen signal change on SD and orbital variation, but I wouldn't call it noisy detector based on what Jack provided.

Bill) Maybe the better term is non-optical noise.

RD) One thing I need to check is the 4095 DN count. Is there any solar activity during that period? Has the noise pattern returned?

JX) I don't know about solar activity. After day 162, the noise levels for B20-23 have came back to the levels prior to day 158.

Participant: Chris Moeller – Terra DSM RVS testing; SWIR checking; De-striping issue

CM) We have the DSM one-day data set in place. We'll make global composite from clear sky radiance map, hopefully to see the improvement in the CO_2 region.

CM) From the data [*Terra*] provided by Vincent [*for B28 noisy detector impact*], I don't see too much change on SWIR B26. I did notice striping in B5. If we could adjust the calibration curves for those detectors, that may improve the striping.

JX) Band 5 uses the screen factor to calculate the m1. Maybe the screen factor does not work well for B5. We are also thinking of using B25 to replace B28 for SWIR OOB correction.

CM) Like the striping issue raised by Steve Platnick, you will hear a lot of atmosphere striping issues. Wisconsin will bring the de-striping issue to MODIS STM.

Participant: Gary Toller – Past MsWG packages and minutes on the web

GT) We have put all the MsWG meeting materials and minutes starting from 2001 to our MCST web site. We will provide user login name and password for MsWG participants.
http://www.mcst.ssai.biz/meetings/mswg
Username: mswg
Password: modis333

VS) You can put them into MODARCH.

Next MsWG meeting scheduled on July 21, 2004